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ENTOMOLOGY.—New species of Metachroma and other chrysomelid beetles from the West Indies. Doris H. Blake, Arlington, Va.

This paper contains the description of six new black or dark metallic colored species of Metachroma Dejean, a small pale species of Aphthona Deiean, and the second species of Megasus Jacoby to be described, all of which are from the West Indies.

Megasus semivittatus, n. sp. Fig. 1

Length 3 mm, faintly shining, pale yellowbrown with a dark median spot extending from occiput down front of head, a dark stripe on each side of prothorax bordering on the explanate margin and a stripe along the sides of the elytra, a short sutural vitta at base and another interrupted one at the middle; also running diagonally across each elytron from apex to humerus a faint orange band. Basal sulcus on prothorax not very distinct and not limited at the ends. Antennae as long as beetle.

Head with interocular space a little more than half its width; occiput smooth, impunctate, a broad median dark stripe extending to above tubercles: tubercles faintly marked, without median groove, bulging slightly over antennal sockets: a fovea on each side near eye. Below antennal sockets on each side a shallow excavation divided in the middle by a narrow, slightly produced carina. Antennae as

¹ Received April 21, 1948.

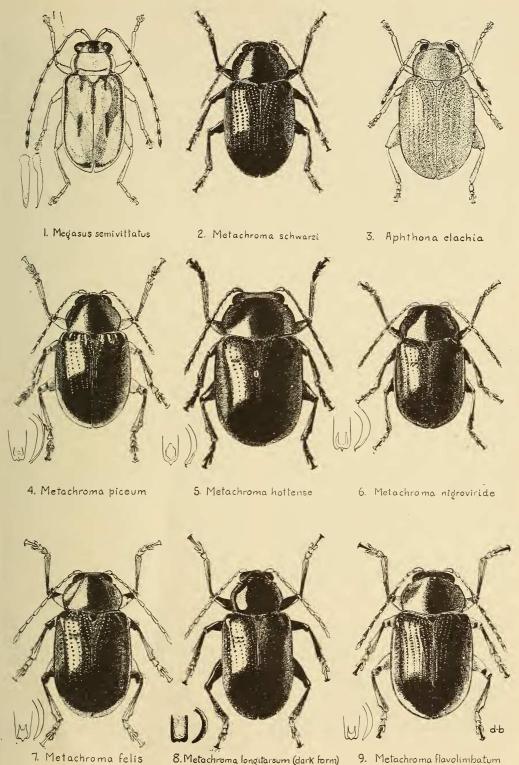
long as body, joints 2 and 3 short, joints 4-7 long, remainder a little shorter; the basal joints pale, apices of joints 4-11 slightly darker. Prothorax approximately twice as broad as long. with slightly rounded sides, obtuse anteriorly and a sharp tooth at basal angle; a very indistinct and shallow basal groove, not limited at the ends by a longitudinal fovea; surface impunctate, pale, with a dark stripe along the side next to the explanate margin. Elytra a little broader than prothorax and also with a dark stripe along the side extending to the suture at the apex, and at base extending around and down suture but not to the middle, also a short interrupted median stripe at base and middle, and a faint orange diagonal stripe across the elytron; surface impunctate and faintly shining. Body beneath pale, with paler legs. Anterior coxal cavities open, hind femora enlarged, hind tibiae slightly grooved, a short spur at the tip, first tarsal joint long, claws appendiculate. Length 3 mm, width 1.3 mm.

Type male, U.S.N.M. no. 58777,

Type locality.—Mandeville, Jamaica, collected by Van Duzee in April 1906 (from the Wickham collection).

Remarks.—The genus Megasus was described by Jacoby² to accommodate a beetle from Gua-

² Jacoby, Biologia Centrali-Americana, Coleoptera, 6(pt. 1): 321. 1884.



S 8. Metachroma longitarsum (dark form) 9. Metachroma flavolimbatum Figs. 1-9.—New West Indian Chrysomelidae.

temala that did not quite fit into the genus Lactica because of its very long antennae and the thoracic groove, which was not limited at the ends by a longitudinal fovea. This second species closely corresponds with Megasus bimaculatus in all but marks of coloration. The strikingly long antennae, the head with its poorly developed frontal tubercles and closely set antennae, the transverse thorax with its obtuse anterior angles, and with the basal groove in this species rather more indistinct than in bimaculatus and without limiting side fovea, the large scutellum, the legs with the hind tibiae grooved and with a spur at the end, the appendiculate claws, the open anterior coxal cavities, all fit into this genus erected by Jacoby. I have compared the beetle with a specimen labeled by Jacoby as M. bimaculatus in the Bowditch collection at Cambridge.

Aphthona elachia, n. sp. Fig. 3

About 1.3 mm. in length, ovate, shining pale yellow-brown, eighth and ninth antennal joints dark; thorax finely punctate, elytral striae fine and disappearing before the apex.

Head polished, a short sulcus on each side of front, interantennal carina narrow, slightly produced, interocular space about half width of head. Antennae not reaching the middle of the elytra, pale yellow with eighth and ninth joints and tip of last black. Prothorax not quite twice as broad as long, moderately convex with rounded sides and obliquely cut anterior angles, basal margin at sides obtusely angulate; surface shining, finely and shallowly punctate. Elytra broad and somewhat convex, shining, striate punctures fine and becoming indistinct at apex. Body beneath pale, shining, lightly pubescent. Length 1.3–1.4 mm; width 0.7 mm.

Type female and one female paratype, M.C.Z. type no. 27828.

Type locality.—Morne Trou d'Eau, Haiti, collected by P. J. Darlington, November 19, 1934. Other locality: Port-au-Prince, Haiti, collected by P. J. Darlington, October 6, 1934.

Remarks.—This is a smaller, paler, less convex species than A. fraterna Blake and has only the eighth and ninth and tip of the last joint of the antennae dark; in that species joints 6-9 are dark.

Metachroma schwarzi, n. sp. Fig. 2

About 4.5 mm in length, oblong, shining black with reddish-brown mouthparts, antennae, and tarsi; elytral striae distinct to the apex.

Head with interocular space about half its width, shining above, alutaceous in lower front. densely punctate, no distinct transverse line between antennal sockets, groove about inner side of eve distinct. Antennae not extending halfway down the elytra, deep reddish brown, of the usual proportions. Prothorax not twice as wide as long, with arcuate sides and a small tooth at apical and basal angles, an impressed line along basal margin and behind the eyes on the anterior margin; surface polished, finely punctate. Elytra entirely dark, shining, a very slight lateral depression below the humerus. striate punctures coarse and distinct to the apex and rather deeply impressed. Epipleura distinct almost to the apex. Body beneath shining, piceous with the tip of the abdomen a little paler, legs dark with pale tarsi, a tiny tooth on hind femora. Length 4.4-4.5 mm; width 2.5 mm.

Type female, U.S.N.M. no. 58778, and one female paratype in M.C.Z.

Type locality.—Cayamas, Santa Clara Province, Cuba, collected by E. A. Schwarz.

Remarks.—Dr. Schwarz himself labeled this as a new species. It strongly resembles M. adustum Suffrian but has entirely black elytra and black legs. The elytral punctation is coarser and distinct to the apex and the eyes are smaller and more widely set.

There is a series of seven specimens taken by Darlington at Soledad (Cienfuegos), Cuba, in 1929 and 1936 that also have entirely dark elytra, but which are clearly very closely related to M. adustum, if not a color variety. They seem a little less deeply and coarsely striate-punctate than M. adustum, and the tip of the aedeagus is a little thinner. Whether this is a subspecies of adustum Suffrian or merely a color form is not clear.

Metachroma felis, n. sp. Fig. 7

About 5 mm in length, oblong, shining black with pale antennae, legs, and elytral apex.

Head with interocular space less than half the width, shining on occiput and front, more alutaceous on lower front, densely punctate, no distinct transverse line between antennal sockets, a slight, short, median vertical groove and the usual groove around eye, labrum and mouthparts reddish or yellowish brown. Antennae pale, extending about to the middle of the elytra, of the usual proportions. Prothorax not twice as wide as long with arcuate sides and a small tooth at each corner, and an impressed line along the sides and basal margin and up behind the eyes on anterior margin; surface polished, with obsolete and moderately dense punctation. Elytra very shining, rows of punctures distinct in basal half but becoming indistinct after the middle and vanishing at the apex, the striate punctures on the sides regular but short. Elytra entirely dark except for a narrow strip along the apex. Epipleura vanishing shortly before the apex. Body beneath deep brown, shining, legs pale with the narrowed apex of femora dark and a dark streak down the tibiae. Hind femora with a small tooth. Length 4.7-5.5 mm; width 2.5-3 mm.

Type male and one female paratype, M.C.Z. type no. 27827.

Type locality.—Arthurstown, Cat Island, Bahamas, collected July 23, 1935, by W. J. Clench.

Remarks.—This is one of the species very closely related to M. adustum Suffrian. It differs from the others in having only a narrow pale apex to the elytra and no pale area along the sides or on the humeri, which are usually pale in the Florida and Cuban beetles. It is also slightly larger than either of them, and the tip of the aedeagus is broader than that of M. adustum and more like that of M. terminale Horn. The elytral striae are not so impressed as in the other closely related species. There is one specimen, a female, in the National Museum collection from Eleuthera, Bahamas, collected in July by H. F. Wickham, that seems to be the same species.

A single specimen, a female, from Constanza, Dominican Republic, elevation 3000–4000 feet, collected in August 1938 by P. J. Darlington, represents another closely allied species or subspecies. In this specimen the head is more

polished and finely punctate, the punctures of the elytral striae are not so dense, and the pale area on the elytra extends broadly along the sides and at the apex. This single specimen, however, does not present such distinct differences as occur in *M. schwarzi* and *felis*.

Metachroma flavolimbatum, n. sp. Fig. 9

About 5 mm in length, oblong, shining piceous with head in part, basal antennal joints, anterior margin of prothorax, margin of elytra and legs reddish, femora banded near apex.

Head with interocular space less than half its width, no distinct line between clypeus and front, a median depression on front, the usual groove around eye; surface alutaceous and rather densely and obsoletely punctate, the occiput and a median area down front piceous, rest reddish brown, jaws piceous. Antennae extending to the middle of the elytra, second and third joints subequal, remainder longer and with only apices pale. Prothorax not twice as broad as long with arcuate sides and a small tooth at basal and anterior angles, an impressed line along basal margin and on sides of anterior margin behind the eyes; surface very finely and obsoletely punctate, mostly shining piceous but reddish brown anteriorly. Elytra with small humeri and a slight basal callosity and depression below it, striate punctures deeply impressed and dense, becoming finer and shallower in apical half, in short, regular rows on sides; shining piceous with the sides from humerus to apex pale, the pale area wider at apex. Body beneath reddish brown, shining, almost glabrous, legs pale yellow with a dark band around narrowed part of femora and a dark streak down tibiae; hind femora with a faint trace of tooth. Length 5 mm.; width 2.8 mm.

Type male U.S.N.M. no. 58779.

Type locality.—Mess Castle near Antully, St. Thomas Parish, Jamaica, collected November 5, 1928, by C. R. Orcutt.

Remarks.—This is another of the adustum group of species. It is slightly larger than adustum, and the aedeagus has a shorter point to the tip. Unlike most of the species in the adustum group it has the antennae mostly dark.

Metachroma piceum, n. sp. Fig. 4

About 4.5 mm in length, ovate, shining, deep reddish brown to piceous with pale legs, the femora banded at the narrowed apex, tibiae in part darkened, elytra with paler streaks along the basal margin and on humeri and pale along the sides at the apex, base of antennal joints 3–11 dark. All femora mucronate.

Head with interocular space about half its width, rounded over occiput with broad front having a short median depression between the nearly obsolete frontal tubercles: dark piceous with a reddish-brown area on each side of front, lower front and labrum also reddish; surface dull and alutaceous with fine, shallow punctures. Antennae not reaching the middle of the elytra, third joint shorter than fourth, basal joints pale reddish and joints 3-11 darker at the base. Prothorax wider than long with arcuate sides, a small tooth at each corner and an impressed line along basal margin and behind the eyes on anterior margin; surface polished, very minutely punctate; piceous with deep reddish brown streaks along anterior and basal margins, possibly in pale specimens only a piceous transverse band. Elytra striately punctate, the punctures coarsest in transverse depression below basal callosity, becoming fine at apex; shining deep piceous with reddish brown streaks along short raised basal costae and on humeri and a pale margin along the apex, and partly along the sides. Epipleura disappearing before the apex. Body beneath deep reddish brown with tip of abdomen and legs paler, femora near apex banded and tibiae with deeper shading in basal half, all femora with a small tooth, tibiae ridged and emarginate in two hind pairs, claw joint very long. Length 4.4-4.6 mm; width 2.6 mm.

Type male, M.C.Z. type no. 27824; one paratype.

Type locality.—Main Range, Blue Mountains, 5,000–7,388 feet elevation, Jamaica, collected August 17–19, 1934, by P. J. Darlington; paratype collected at Whitfield Hall, Blue Mountains, near 4,500 feet elevation, Jamaica, August 13–20, 1934, by P. J. Darlington.

Remarks.—Although the pale coloration at the apex of the elytra is suggestive of beetles of the *M. adustum* alliance, *M. piceum* does not belong to that group, being more oval and with reddish-brown markings and with more widely set eyes.

Metachroma longitarsum Blake

(dark color form)

Fig. 8

Metachroma longitarsum Blake, Journ. Washington Acad. Sci. 36: 24, 1946.

A dark color form of this species, represented by three black specimens not associated with the pale reddish-brown spotted female in the original working up of the material, has come to my notice. Except for the dark color these three specimens agree in every way with the pale spotted form, having similar size, shape, and punctation, and furthermore they were collected at the same time and place. They are entirely dark except for the mouthparts, frontal tubercles in part, antennae, and tarsi.

Metachroma nigroviride, n. sp. Fig. 6

From 4 to 4.5 mm in length, broadly oblong, shining, deep reddish brown to dark metallic green with reddish antennae and legs varying from reddish brown to metallic green, prothorax lightly punctate; elytral striate punctures becoming very fine at apex.

Head with interocular space about half its width, smoothly rounded over occiput and down front, no distinct transverse sulcus between antennal sockets, a faint median vertical line down front in some specimens, the usual groove about inner side of eye; finely and obsoletely punctate, more distinctly in lower front. Antennae reaching about to the middle of the elvtra, reddish, the distal joints tending to be darker. Prothorax not quite twice as wide as long, smoothly convex, with arcuate sides and a small tooth at apical and basal angles, surface polished, finely and not densly punctate. Scutellum polished. Elytra with a slight basal callosity, well-marked humeri, and a short intrahumeral depression and slight transverse depression below basal callosity; rows of striate punctures distinct but not very coarse and becoming finer towards apex; epipleura disappearing shortly before apex. Body beneath deep reddish brown to piceous, shining, lightly pubescent, hind femora with a small tooth, tibiae ridged and in middle and posterior pair emarginate near apex. Length 4-4.5 mm; width 2.5-2.6 mm.

Type male, M.C.Z. type no. 27825; 6 paratypes, 1 paratype (no. 58781) in U.S. National Museum.

Type locality.—Puerto Plata, Dominican Republic, collected by Hurst. Other localities: Villa Altagracia, collected in July 1938 by P. J. Darlington; Constanza, elevation 3,000-4,000 feet, collected in August 1938 by P. J. Darlington, both in Dominican Republic.

Remarks.—Three of the eight specimens examined are deep reddish brown without trace of the metallic green of the others. Possibly these are immature specimens.

Metachroma hottense, n. sp.

Fig. 5

About 3 mm in length, broadly oblong, polished dark metallic green with dark brown mouthparts, antennae, legs, and undersurface; head and thorax impunctate, striate punctures on elytra coarsest below basal callosity, on sides and at apex becoming indistinct.

Head with interocular space more than half its width, front broad, flat, impunctate, no transverse groove between antennal sockets; the usual groove running up on inner side of eye. Labrum reddish brown. Antennae scarcely reaching the middle of the elytra, five basal joints reddish, distal joints deep piceous, joints 2-4 subequal and shorter than the remainder. Prothorax not twice as broad as long, moderately convex, with arcuate sides and small tooth at each angle, surface polished, impunctate, basal margin lightly sinuate, an impressed line along it and behind the eyes on anterior margin. Elytra a little broader than prothorax with a short intrahumeral sulcus and a transverse depression below basal callosity, the striate punctures in this coarser than elsewhere, at sides and apex becoming rather indistinct; surface polished. Epipleura disappearing shortly before apex; body beneath dark, shining, lightly pubescent, femora not toothed, tibiae ridged; middle and hind tibiae emarginate near apex. Length 3.2 mm; width 2 mm.

Type male, M.C.Z. type no. 27826.

Type locality.—Desbarriere, Morne La Hotte, Haiti, near 4,000 feet, collected October 12–14, 1934, by P. J. Darlington.

Remarks.—This beetle is considerably smaller than M. nigroviride and the thorax differs in not being punctate at all.

ORNITHOLOGY.—The races of the red-whiskered bulbul, Pycnonotus jocosus (Linnaeus). H. G. Deignan, U. S. National Museum.

The red-whiskered bulbuls may be conveniently divided into two main groups, in one of which adults have the red feathers of the infraocular tuft long and brighter, while in the other they have them short and darker. To the first category belong only fuscicaudatus, abuensis, pyrrhotis, emeria, and pequensis. A tentative arrangement of the races, with descriptions of two new forms, is offered below.

For the privilege of examining their series of this species, my thanks are hereby tendered to the authorities of the American Museum of Natural History and of the Academy of Natural Sciences of Philadelphia.

Pycnonotus jocosus fuscicaudatus (Gould)
 Otocompsa fuscicaudata Gould, Proc. Zool. Soc.
 London, for 1865, pt. 3: 664. March 1866 ("The

¹ Published by permission of the Secretary of the Smithsonian Institution. Received January 16, 1948. southern portion of the peninsula of India . . . very common in many parts of the Madras Presidency"; type locality restricted to the Nilgiri Hills, Nilgiri Hills District, Madras Presidency, by Whistler and Kinnear, Journ. Bombay Nat. Hist. Soc. 35: 756. July 15, 1932).

Range.—Western India, from the Tapti River south to Cape Comorin and the Salem District of the Madras Presidency.

2. Pycnonotus jocosus abuensis (Whistler)

Otocompsa jocosa abuensis Whistler, Bull. Brit. Orn. Club **52**: 40. Dec. 1, 1931 (Mount Abu, Abu District, Sirohi State, South Rajputana Agency, India).

Range.—Southeastern Rajputana.

Remarks.—This race and the precedent one differ from all others in the absence of conspicuous white tips from the outer tail feathers.

 Pycnonotus jocosus pyrrhotis (Hodgson)
 [Ixos] pyrrhotis Hodgson, in J. E. Gray, Zoological Miscellany, No. 3: 84. "June" 1844 (Nepal).
 Ixos jocosus v[el]. pyrrhotis "Hodgs." J. E. Gray,